

147; 6,347,996; 6,315,660; 6,270,411; 6,234,897; 6,203,429; 6,190,255; 6,159,098; 6,159,097; 6,155,925; and 6,004,207, which are hereby incorporated by reference herein.

[0062] As shown in **FIGS. 8a-c, 9a-c, and 10a-c**, the video image **18** may be used to modify one or more symbols printed on one or more of the stopped mechanical reels **12a, 12b, 12c**. For example, in response to a predetermined random or non-random event, the video image **18** may transform a reel symbol into a different symbol, such as a symbol needed to complete a winning combination. The different symbol is generated by the video image **18**. In **FIGS. 8a-c**, the video image **18** depicts an animation transforming (e.g., “morphing”) a blank symbol on mechanical reel **12b** into a BELL symbol to form a winning combination of three BELL symbols along pay line **22c**.

[0063] In addition, referring to **FIGS. 9a-c**, in response to a predetermined random or non-random event, the video image **18** may depict an animation in which a video indicator **29** is moved from a periphery of the display area (e.g., a corner of the display area away from the mechanical reels) to one or more of the symbols on the reels. The moving indicator **29** may identify the reel symbols to which it moves as a special symbol to be evaluated as, for example, a wild symbol or a scatter pay symbol. In further implementations, the moving indicator may comprise a window that moves over symbols.

[0064] In **FIGS. 10a-c**, a video indicator **29** has moved to a CHERRY symbol on mechanical reel **12c**. If the CHERRY symbol is thereby designated a wild symbol, the displayed symbol array includes a winning combination of three MELON symbols along pay line **22c** where one of the three MELON symbols is formed by the wild symbol. Further, in **FIGS. 10a-c**, the video image **18** depicts an animation transforming a BELL symbol on reel **12c** into a SEVEN symbol to form a winning combination of three SEVEN symbols along pay line **22c**. The replacement SEVEN symbol generated by the video image **18** is sufficiently opaque or translucent to substantially cover the BELL symbol printed on mechanical reel **12c**.

[0065] In some embodiments, the symbols display on a primary game display may be either blank or generic, and the superimposed video image **18** may be used to differentiate the symbols by adding supplemental indicia. For example, a generic reel based gaming machine may comprise reels having blank or generic symbols, and the superimposed video image may be used to provide a theme for the wagering game. Further, the symbols may be blank and the supplemental indicia may add a value to the symbol. In some embodiments, the supplemental indicia may add a rank and/or suit to symbols representing playing cards. In some embodiments, the video image **18** may be synchronized with the movement of the reels. In further implementations, a live video or generated animation may be displayed over one or more symbols on a mechanical reel.

[0066] While symbols on reels have been described above, it should be noted that any type of symbol display mechanism may be used. For example, the symbols may appear on a “flipper” comprising a series of tabs arranged on a hub. Two of the tabs, a top and bottom tab are exposed to the player and present a symbol. As the hub rotates, the next tab “flips” over, thereby exposing a new top and bottom tab. A

video image may be superimposed over such a top and bottom tab in the same manner as discussed above with respect to symbols on reels. The invention is not limited to any particular mechanism for displaying a symbol or symbol space.

[0067] The slot machine is preferably designed to adjust the appearance of the video image **18** in terms of transparency, translucency, or opacity depending on the purpose of the video image **18**. On the one hand, to permit clear viewing of the mechanical reels **12a, 12b, 12c** underlying the video image **18**, the portion of the video image **18** directly overlying the reels is made more transparent.

[0068] On the other hand, to facilitate viewing of the video image **18** without visual interference from the underlying mechanical reels, the video image **18** is made more opaque through proper selection of colors and their level of brightness. Also, to accentuate the video image **18** relative to the underlying reels following a reel spin, any lamps illuminating the reels during a reel spin may be turned off or dimmed following the reel spin. In addition, if the reels include blank symbols (e.g., solid white areas), any video graphics over such blank symbols will be readily visible. Similarly, any video graphics alongside, just above, or just below the underlying reels will be readily visible.

[0069] Further, in the direct image embodiment of **FIG. 2a**, the transmissive video display **14a** may be backed by an extendable opaque shade during the bonus game. The shade is retracted from the display area **16** during the basic slot game. When the central processing unit shifts operation from the basic slot game to the bonus game, the shade extends through the display area to separate the transmissive video display **14a** from the underlying reels and thereby completely shield the underlying reels.

[0070] Superimposed video image **18** may be used to display non-gaming images. For example, in some implementations, superimposed video image **18** may display advertising. Further, in attract mode, a superimposed video image **18** may be used to display images designed to entice a player to keep playing, or a potential player to start playing the wagering game.

[0071] In some embodiments of the invention, superimposed video image **18** may be used to provide an administrative interface to a gaming machine. For example, the superimposed video image **18** may provide a diagnostic interface or a setup interface for the gaming machine. In the case of a diagnostic interface, color may be used to include the status of various components within the gaming machine.

[0072] In further embodiments of the invention, superimposed video image **18** may be used to provide a live broadcast stream to a player. For example, a player may wish to view a sporting event being broadcast over public airwaves or cable channels. The superimposed video image **18** may be used to display such broadcasts while the player is playing the wagering game.

[0073] It should be noted that in nearly all cases, the images supplied by superimposed video image **18** may change over time. For example, the theme of symbols, reels or advertising may be changed based on the time of day, the day of the week, or in accordance with a holiday. Further details concerning time-based changes are disclosed in